

**WHAT IS CLAIMED IS:**

1. A conditioning disk comprising:  
a substrate having top and bottom surfaces;  
a plurality of abrasive particles arranged on at least a portion of said  
5 top substrate surface, said abrasive particles affixed to said substrate with a  
matrix material; and  
a carrier affixed to said bottom substrate surface,  
wherein said carrier comprises at least one of synthetic plastic or ceramic.
- 10 2. The conditioning disk of claim 1 wherein said abrasive particles  
comprise at least one of aluminum oxide, cubic boron nitride, or diamond.
3. The conditioning disk of claim 1 wherein said matrix material  
comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt,  
15 titanium, zinc, iron, manganese, or silicon.
4. The conditioning disk of claim 1 further comprising a corrosion  
resistant powder.
- 20 5. The conditioning disk of claim 1 wherein said substrate is formed of  
said matrix material.
6. The conditioning disk of claim 1 wherein said substrate is more  
flexible than said carrier.
- 25 7. The conditioning disk of claim 1 wherein said carrier is affixed to  
said substrate with an adhesive.
8. The conditioning disk of claim 1 wherein said abrasive particles are  
30 arranged in a predetermined pattern.

9. The conditioning disk of claim 1 wherein said matrix material comprises a brazing alloy.

10. The conditioning disk of claim 9 wherein said abrasive particles are  
5 diamond and said brazing alloy comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

11. The conditioning disk of claim 9 wherein said abrasive particles are  
cubic boron nitride and said brazing alloy comprises at least one of aluminum,  
10 boron, carbon, or silicon.

12. The conditioning disk of claim 9 wherein said abrasive particles are  
aluminum oxide and said brazing alloy comprises at least one of aluminum, boron,  
carbon, or silicon.

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13. A conditioning disk comprising:  
a substrate having top and bottom surfaces;  
a plurality of abrasive particles arranged on at least a portion of said  
top substrate surface, said abrasive particles affixed to said substrate with a  
20 matrix material; and  
a polycarbonate carrier affixed to said bottom substrate surface.

14. The conditioning disk of claim 13 wherein said abrasive particles  
comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

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15. The conditioning disk of claim 13 wherein said matrix material  
comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt,  
titanium, zinc, iron, manganese, or silicon.

16. The conditioning disk of claim 13 further comprising a corrosion  
30 resistant powder.

17. The conditioning disk of claim 13 wherein said carrier is affixed to said substrate with an adhesive.

18. The conditioning disk of claim 13 wherein said abrasive particles  
5 are arranged in a predetermined pattern.

19. The conditioning disk of claim 13 wherein said matrix material comprises a brazing alloy.

20. The conditioning disk of claim 19 wherein said abrasive particles  
10 are diamond and said brazing alloy comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

21. The conditioning disk of claim 19 wherein said abrasive particles  
15 are cubic boron nitride and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

22. The conditioning disk of claim 19 wherein said abrasive particles  
20 are aluminum oxide and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

23. A conditioning disk comprising:  
a substrate having top and bottom surfaces;  
a plurality of abrasive particles arranged on at least a portion of said  
25 top substrate surface, said abrasive particles affixed to said substrate with an electroplated metal; and  
a carrier affixed to said bottom substrate surface,  
wherein said carrier comprises at least one of synthetic plastic or ceramic.

24. The conditioning disk of claim 23 wherein said carrier comprises  
30 polycarbonate.

25. The conditioning disk of claim 23 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

26. The conditioning disk of claim 23 wherein said electroplated metal  
5 comprises nickel.

27. The conditioning disk of claim 26 wherein said abrasive particles are diamond.

10 28. The conditioning disk of claim 23 wherein said substrate is formed of said electroplated metal.

29. The conditioning disk of claim 23 wherein said carrier is affixed to said substrate with an adhesive.  
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30. The conditioning disk of claim 23 wherein said abrasive particles are arranged in a predetermined pattern.